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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/729,774
Filing Date: December 08, 2003
Appellant(s): SCHREDER ET AL.

Paul D. Greeley
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 30 April 2009 appealing from the Office action mailed 24 July 2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

4,803,039	Impink et al.	02-1986
5,631,825	Van Weele et al.	09-1993
5,881,115	Lipner	11-1997

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 2-5 and 7-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,881,115 (hereinafter Lipner) in view of U.S. Patent No. 5,631,825 (hereinafter Van Weele).

2. Claims 2-5 and 7-15 are rejected under 35 U.S.C. 103(a) as obvious over Lipner in view of Van Weele or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lipner in view of Van

Weele in further view of U.S. Patent No. 4,803,039 (hereinafter Impink).

3. The following ground(s) of rejection are applicable to the appealed claims and were set forth in the Final Office Action mailed 24 July 2008, reproduced below for completeness:

Claims 2-5 and 7-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,881,115 (hereinafter Lipner) in view of U.S. Patent No. 5,631,825 (hereinafter Van Weele).

As per claim 2, Lipner teaches as set forth below determining whether said current output is an information type (determining when a step's condition is not meet, the step is violated); and marking said current output as complete (col. 4, lines 24-25), if said current output is said information type (col. 2, lines 27-35, col. 4, lines 21-22 and col. 6, lines 16-22; the automatic sequencing will terminate requiring operator intervention (i.e. at least on interactive instruction)).

As per claim 3, Lipner teaches as set forth below after the executing step, storing a value of said automatic expression to a destination reference (col. 3, lines 49-51).

As per claim 4, Lipner teaches a control system that uses, sequential control modules, said control system comprising:

a user interface component (col. 3, lines 47-49, Fig. 1, element 33 and 35) that provides at least a table view (Fig. 3), said table view comprising:

a plurality of outputs (col. 5, lines 62-65 and Fig. 3, element 67) of a step (Fig. 3, element 65) of at least one of said sequential control modules (col. 2, lines 10-13, col. 4, lines 53-55, col. 5, lines 3-5 and Fig. 3, element 47), wherein said outputs comprise a combination of at least one automatic expression (col. 2, lines 27-35 and col. 4, lines 19-20; i.e. automatic sequencing/Automatic Mode) and at least one interactive instruction (col. 2, lines 27-35 and col. 4, lines 21-22; when a sequential module is in an automatic sequence mode (i.e. at least one automatic expression) wherein a step's condition is not meet, the step is violated, the automatic sequencing will terminate requiring operator intervention (i.e. at least one interactive instruction)),

a summary area (Fig. 3, element 49) that provides a name of said sequential control module and a list of steps in said sequential control module (col. 2, lines 10-13, col. 4, lines 53-55, col. 5, lines 3-5 and Fig. 3, element 47),

a details area that provides a step name and a step description for said step (Fig. 3, element 65), and

a parameters area that provides a current value of at least one parameter associated with said step (col. 5, lines 63-65 and Fig. 3, element 67);

an operator station (Fig. 1, element 19) that executes said user interface component (col. 3, lines 44-47) and that responds to at least one input operator for said interactive instruction (col. 2, lines 27-35, col. 3, lines 58-64, and col. 4, lines 19-22); and

at least one controller (col. 3, lines 18-21 and Fig. 1, element 15) that is operated by executing said interactive instruction at least partly in response to said operator input and said automatic expression automatically (col. 2, lines 27-35 and col. 4, lines 19-22 and 55-63).

Lipner does not expressly teach wherein said selected step is selected from said list (col. 5, lines 33-37).

Van Weele teaches a selected step (col. 7, lines 33-40, i.e. Sequence) is selected (col. 7, lines 3-24) from said list (col. 7, lines 41-50, i.e. Section).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Lipner to include a selected step is selected from said list to more efficiently control and supervise increasingly complex manufacturing processes by subdividing informational attributes (col. 2, lines 1-4).

As per claim 5, Lipner teaches as set forth above a journaling component (Fig. 1, element 37) capable of being executing on said operator station for recording information related to the execution of said sequential control module (col. 3, lines 49-51).

As per claim 7, Lipner teaches as set forth above an additional details area (Fig. 3, element 61) for information associated with said selected step (col. 5, lines 53-57).

As per claim 8, Lipner does not expressly teach a trend area that provides a graph of said at least one parameter associated with said selected step.

Van Weele teaches a trend area that provides a graph of said at least one parameter associated with said selected step (col. 33, lines 34-39 and 42-47).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Lipner to include a trend area that provides a graph of said at least one parameter associated with said selected step to more efficiently control and supervise increasingly complex manufacturing processes by subdividing informational attributes (col. 2, lines 1-4).

As per claim 9, Lipner teaches as set forth above said details area includes a confirmation component to receive a confirmation from said operator (col. 6, lines 16-22 and Fig. 3, element 59).

As per claim 10, Lipner teaches as set forth above said user interface component also provides a sequential function chart view (col. 4, lines 2-4 and Fig. 2, element 41).

As per claim 11, Lipner teaches a computer readable medium having executable instructions stored thereon to perform a method in a control system that uses sequential control modules, said method comprising:

providing a type indication on a display (col. 3, lines 47-49 and Fig. 1, element 33 and 35) for an instruction (Fig. 3, element 65) in a sequential control module (col. 2, lines 10-13, col. 4, lines 53-55, col. 5, lines 3-5 and Fig. 3, element 47), said type being confirmable (col. 2, lines 27-35 and col. 4, lines 19-20; i.e. automatic sequencing/Automatic Mode) or informational (col. 2, lines 27-35 and col. 4, lines 21-22; when a sequential module is in an automatic sequence mode wherein a step's condition is not meet, the step is violated, the automatic sequencing will terminate requiring operator intervention); and

receiving a confirmation from an operator before completing said instruction, if said type is confirmable (col. 6, lines 16-22 and Fig. 3, element 59)

at least one of said executable instructions causing an interactive display screen (col. 2, lines 27-35, col. 4, lines 19-22 and col. 6, lines 16-22; when a sequential module is in an automatic sequence mode wherein a step's condition is not meet, the step is violated, the automatic sequencing will terminate requiring operator intervention) to be presented to an operator that displays:

a plurality of outputs (col. 5, lines 62-65 and Fig. 3, element 67) of a step (Fig. 3 element 65) of at least one of said sequential control modules (Fig. 3, element 47), wherein said outputs comprise a combination of both automatic expression (col. 2, lines 27-35 and col. 4, lines 19-20; i.e. automatic sequencing/Automatic Mode) and at least one interactive instruction (col. 2, lines 27-35 and col. 4, lines 21-22; when a sequential module is in an automatic sequence mode (i.e. at least one automatic expression) wherein a step's condition is not meet, the step is violated, the automatic sequencing will terminate requiring operator intervention (i.e. at least on interactive instruction)),

a summary area (Fig. 3, element 49) that provides a name of said sequential control module (Fig. 3, element 47) and a list of steps in said sequential control module (col. 2, lines 10-13, col. 4, lines 53-55 and col. 5, lines 3-5),

a details area that provides a step name and a step description for said step (Fig. 3, element 65), and

a parameters area that provides a current value of at least one parameter associated with said step (col. 5, lines 63-65 and Fig. 3, element 67);

at least one of said executable instructions causing a determination of whether a current one of said outputs is an interactive instruction or an automatic expression (col. 2, lines 27-35 and col. 4, lines 19-22, i.e. when a state is violated, it is determined that an interactive instruction will occur);

at least one of said executable instructions causing, if said current output is an interactive instruction, a determination of whether said interactive instruction has been confirmed by said operator (col. 2, lines 27-35, col. 4, lines 21-22 and col. 6, lines 16-22; the automatic sequencing will terminate requiring operator intervention (i.e. at least one interactive instruction));

a marking said current output complete (col. 4, lines 24-25); and

at least one of said executable instructions causing, if said current output is an automatic expression, at least one controller (Fig. 1, element 5) in said control system to execute said automatic expression (col. 2, lines 27-35, col. 3, lines 13-17 and col. 4, lines 19-20; i.e. automatic sequencing/Automatic Mode).

Lipner does not expressly teach wherein said selected step is selected from said list.

Van Weele teaches a selected step (col. 7, lines 33-40, i.e. Sequence) is selected (col. 7, lines 3-24) from said list (col. 7, lines 41-50, i.e. Section).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Lipner to include a selected step is selected from said list to more efficiently control and supervise increasingly complex manufacturing processes by subdividing informational attributes (col. 2, lines 1-4).

As per claim 12, Lipner teaches as set forth above the computer readable medium further comprising:

at least one of said executable instructions causing at least one value of a parameter to be associated with at least one of said outputs on said display screen (col. 5, lines 63-65 and Fig. 3, element 67).

As per claim 13, Lipner teaches as set forth above the computer readable medium further comprising:

at least one of said executable instructions causing additional information about said current output to be displayed on said display screen (col. 5, lines 53-57 and Fig 3, element 61).

As per claim 14, Lipner teaches a method of providing interactive control in a control system that uses sequential control modules, said method comprising:

presenting an interactive display screen (col. 4, lines 35-39 and Fig. 3) to an operator that displays:

a plurality of outputs (col. 5, lines 62-65 and Fig. 3, element 67) of a step (Fig. 3, element 65) of at least one of said sequential control modules (col. 3, lines 28-29 and 49-51 and Fig. 3, element 49), wherein said outputs comprise a combination of at least one automatic expression and at least one interactive instruction (col. 2, lines 27-35 and col. 4, lines 19-22),

a summary area that provides a name of said sequential control module and a list of steps in said sequential control module (col. 2, lines 10-13, col. 4, lines 53-55, col. 5, lines 3-5 and Fig. 3, element 49),

a details area that provides a step name and a step description for said step (Fig. 3, element 65), and

a parameters area that provides a current value of at least one parameter associated with said step (col. 5, lines 63-65 and Fig. 3, element 67);

determining whether a current one of said outputs is an interactive instruction (col. 2, lines 27-35 and col. 4, lines 21-22; when a sequential module

is in an automatic sequence mode (i.e. at least one automatic expression) wherein a step's condition is not meet, the step is violated, the automatic sequencing will terminate requiring operator intervention (i.e. at least on interactive instruction)) or an automatic expression (col. 2, lines 27-35 and col. 4, lines 19-20; i.e. automatic sequencing/Automatic Mode);

if said current output is an interactive instruction (col. 2, lines 27-35 and col. 4, lines 19-22, i.e. when a state is violated, it is determined that an interactive instruction will occur), determining whether said interactive instruction has been confirmed (col. 4, lines 24-25) by said operator (col. 6, lines 16-22);

if said interactive instruction has been confirmed by said operator, marking said current output complete (col. 4, lines 24-25); and

if said current output is an automatic expression (col. 2, lines 27-35 and col. 4, lines 19-20; i.e. automatic sequencing/Automatic Mode), using at least one controller (Fig. 1, element 5) in said control system to execute said automatic expression (col. 3, lines 13-17 and col. 4, lines 19-20).

Lipner does not expressly teach wherein said selected step is selected from said list.

Van Weele teaches a selected step (col. 7, lines 33-40, i.e. Sequence) is selected (col. 7, lines 3-24) from said list (col. 7, lines 41-50, i.e. Section).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Lipner to include a selected step is selected from said list to more efficiently control and supervise increasingly complex manufacturing processes by subdividing informational attributes (col. 2, lines 1-4).

As per claim 15, Lipner discloses a control system that uses sequential control modules, said control system comprising:

an operator station (Fig. 1, element 19) that comprises a user interface component (col. 3, lines 47-49 and Fig. 3, element 33 and 35) that provides a display to an operator (Fig. 3) and a program that runs on said operator station an interactive procedure (col. 3, lines 66-67 and col. 4, lines 19-22) to present on said display a table view (Fig. 3) comprising:

a plurality of outputs (col. 5, lines 62-65 and Fig. 3, element 67) of an operator step (Fig. 3, element 65) of at least one of said sequential control modules (col. 2, lines 10-13, col. 4, lines 53-55, col. 5, lines 3-5 and Fig. 3, element 47), wherein said outputs comprise a combination of at least one automatic expression (col. 2, lines 27-35 and col. 4, lines 19-20; i.e. automatic sequencing/Automatic Mode) and at least one interactive instruction (col. 2, lines 27-35 and col. 4, lines 21-22; when a sequential module is in an automatic sequence mode (i.e. at least one

automatic expression) wherein a step's condition is not meet, the step is violated, the automatic sequencing will terminate requiring operator intervention (i.e. at least on interactive instruction))

a summary area (Fig. 3, element 49) that provides a name of said sequential control module (Fig. 3, element 47) and a list of steps in said sequential control module (col. 2, lines 10-13, col. 4, lines 53-55 and col. 5, lines 3-5),

a details area that provides a step name and a step description for said step (Fig. 3, element 65), and

a parameters area that provides a current value of at least one parameter associated with said step (col. 5, lines 63-65 and Fig. 3, element 67); and

a controller (col. 3, lines 18-21 and Fig. 1, element 15) that executes said automatic expression automatically and said interactive instruction at least partly in response to one or more inputs of said operator to said operator station (col. 2, lines 27-35, col. 3, lines 58-64 and col. 4, lines 19-22).

Lipner does not expressly teach wherein said selected step is selected from said list.

Van Weele teaches a selected step (col. 7, lines 33-40, i.e. Sequence) is selected (col. 7, lines 3-24) from said list (col. 7, lines 41-50, i.e. Section).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Lipner to include a selected step is selected from said list to more efficiently control and supervise increasingly complex manufacturing processes by subdividing informational attributes (col. 2, lines 1-4).

If, however the prior art is interpreted differently by a third party, the base reference and secondary reference teach "a display that provides a combination of at least one automatic expression and at least one interactive instruction" as follows:

Claims 2-5 and 7-15 are rejected under 35 U.S.C. 103(a) as obvious over Lipner in view of Van Weele or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lipner in view of Van Weele in further view of U.S. Patent No. 4,803,039 (hereinafter Impink).

As per claim 2, Lipner teaches as set forth below determining whether said current output is an information type (determining when a step's condition is not meet, the step is violated); and marking said current output as complete (col. 4, lines 24-25), if said current output is said information type (col. 2, lines 27-35, col. 4, lines 21-22 and col. 6, lines 16-22; the automatic sequencing will terminate requiring operator intervention (i.e. at least on interactive instruction)).

As per claim 3, Lipner teaches as set forth below after the executing step, storing a value of said automatic expression to a destination reference (col. 3, lines 49-51).

As per claim 4, Lipner teaches a control system that uses, sequential control modules, said control system comprising:

a user interface component (col. 3, lines 47-49, Fig. 1, element 33 and 35) that provides at least a table view (Fig. 3), said table view comprising:

a plurality of outputs (col. 5, lines 62-65 and Fig. 3, element 67) of a step (Fig. 3, element 65) of at least one of said sequential control modules (col. 2, lines 10-13, col. 4, lines 53-55, col. 5, lines 3-5 and Fig. 3, element 47),

a summary area (Fig. 3, element 49) that provides a name of said sequential control module and a list of steps in said sequential control module (col. 2, lines 10-13, col. 4, lines 53-55, col. 5, lines 3-5 and Fig. 3, element 47),

a details area that provides a step name and a step description for said step (Fig. 3, element 65), and

a parameters area that provides a current value of at least one parameter associated with said step (col. 5, lines 63-65 and Fig. 3, element 67);

an operator station (Fig. 1, element 19) that executes said user interface component (col. 3, lines 44-47) and that responds to at least one input operator for said interactive instruction (col. 2, lines 27-35, col. 3, lines 58-64, and col. 4, lines 19-22); and

at least one controller (col. 3, lines 18-21 and Fig. 1, element 15) that is operated by executing said interactive instruction at least partly in response to said operator input and said automatic expression automatically (col. 2, lines 27-35 and col. 4, lines 19-22 and 55-63).

Lipner does not expressly teach wherein said selected step is selected from said list and a display of a combination of at least one automatic expression and at least one interactive instruction.

Van Weele teaches a selected step (col. 7, lines 33-40, i.e. Sequence) is selected (col. 7, lines 3-24) from said list (col. 7, lines 41-50, i.e. Section).

Van Weele does not expressly teach a display of a combination of at least one automatic expression and at least one interactive instruction.

Impink teaches to a display (col. 6, lines 43-51, col. 15, line 67, col. 16, lines 1-5 and Fig. 1, element 27) of a combination (Table II) of at least one automatic expression (col. 13, lines 59-62 and col. 14, lines 51-56 and 59-65) and at least one interactive instruction (col. 14, lines 47-50 and 56-59).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Lipner to include a selected step is selected from said list to more efficiently control and supervise increasingly complex manufacturing processes by subdividing informational attributes (Van Weele: col. 2, lines 1-4); and a display of a combination of at least one automatic expression a major advantage of the display generated in accordance with the invention is that all of the information is brought to one place for use by the operator (Impink: col. 13, lines 52-55).

As per claim 5, Lipner teaches as set forth above a journaling component (Fig. 1, element 37) capable of being executing on said operator station for recording information related to the execution of said sequential control module (col. 3, lines 49-51).

As per claim 7, Lipner teaches as set forth above an additional details area (Fig. 3, element 61) for information associated with said selected step (col. 5, lines 53-57).

As per claim 8, Lipner does not expressly teach a trend area that provides a graph of said at least one parameter associated with said selected step.

Van Weele teaches a trend area that provides a graph of said at least one parameter associated with said selected step (col. 33, lines 34-39 and 42-47).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Lipner to include a trend area that provides a graph of said at least one parameter associated with said selected step to more efficiently control and supervise increasingly complex manufacturing processes by subdividing informational attributes (col. 2, lines 1-4).

As per claim 9, Lipner teaches as set forth above said details area includes a confirmation component to receive a confirmation from said operator (col. 6, lines 15-16 and Fig. 3, element 59).

As per claim 10, Lipner teaches as set forth above said user interface component also provides a sequential function chart view (col. 4, lines 2-4 and Fig. 2, element 41).

As per claim 11, Lipner teaches a computer readable medium having executable instructions stored thereon to perform a method in a control system that uses sequential control modules, said method comprising:

providing a type indication on a display (col. 3, lines 47-49 and Fig. 1, element 33 and 35) for an instruction (Fig. 3, element 65) in a sequential control module (col. 2, lines 10-13, col. 4, lines 53-55, col. 5, lines 3-5 and Fig. 3, element 47), said type being confirmable (col. 2, lines 27-35 and col. 4, lines 19-20; i.e. automatic sequencing/Automatic Mode) or informational (col. 2, lines 27-35 and col. 4, lines 21-22; when a sequential module is in an automatic sequence mode wherein a step's condition is not meet, the step is violated, the automatic sequencing will terminate requiring operator intervention); and

receiving a confirmation from an operator before completing said instruction, if said type is confirmable (col. 6, lines 16-22 and Fig. 3, element 59)

at least one of said executable instructions causing an interactive display screen (col. 2, lines 27-35, col. 4, lines 19-22 and col. 6, lines 16-22; when a sequential module (Fig. 3, element 47) is in an automatic sequence mode wherein a step's condition is not meet, the step is violated, the automatic sequencing will terminate requiring operator intervention) to be presented to an operator that displays:

a plurality of outputs (col. 5, lines 62-65 and Fig. 3, element 67) of a step (Fig. 3 element 65) of at least one of said sequential control modules (Fig. 3, element 47),

a summary area (Fig. 3, element 49) that provides a name of said sequential control module (Fig. 3, element 47) and a list of steps in said

sequential control module (col. 2, lines 10-13, col. 4, lines 53-55 and col. 5, lines 3-5),

a details area that provides a step name and a step description for said step (Fig. 3, element 65), and

a parameters area that provides a current value of at least one parameter associated with said step (col. 5, lines 63-65 and Fig. 3, element 67);

at least one of said executable instructions causing a determination of whether a current one of said outputs is an interactive instruction or an automatic expression (col. 2, lines 27-35 and col. 4, lines 19-22, i.e. when a state is violated, it is determined that an interactive instruction will occur);

at least one of said executable instructions causing, if said current output is an interactive instruction, a determination of whether said interactive instruction has been confirmed by said operator (col. 2, lines 27-35, col. 4, lines 21-22 and col. 6, lines 16-22; the automatic sequencing will terminate requiring operator intervention (i.e. at least one interactive instruction));

a marking said current output complete (col. 4, lines 24-25); and

at least one of said executable instructions causing, if said current output is an automatic expression, at least one controller (Fig. 1, element 5) in said control system to execute said automatic expression (col. 2, lines 27-35, col. 3, lines 13-17 and col. 4, lines 19-20; i.e. automatic sequencing/Automatic Mode)).

Lipner does not expressly teach wherein said selected step is selected from said list and a display of a combination of at least one automatic expression and at least one interactive instruction.

Van Weele teaches a selected step (col. 7, lines 33-40, i.e. Sequence) is selected (col. 7, lines 3-24) from said list (col. 7, lines 41-50, i.e. Section).

Van Weele does not expressly teach a display of a combination of at least one automatic expression and at least one interactive instruction.

Impink teaches to a display (col. 6, lines 43-51, col. 15, line 67, col. 16, lines 1-5 and Fig. 1, element 27) of a combination (Table II) of at least one automatic expression (col. 13, lines 59-62 and col. 14, lines 51-56 and 59-65) and at least one interactive instruction (col. 14, lines 47-50 and 56-59).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Lipner to include a selected step is selected from said list to more efficiently control and supervise increasingly complex manufacturing processes by subdividing informational attributes (Van Weele: col. 2, lines 1-4); and a display of a combination of at least one automatic expression a major advantage of the display generated in accordance with the invention is that all of the information is brought to one place for use by the operator (Impink: col. 13, lines 52-55).

As per claim 12, Lipner teaches as set forth above the computer readable medium further comprising:

at least one of said executable instructions causing at least one value of a parameter to be associated with at least one of said outputs on said display screen (col. 5, lines 63-65 and Fig. 3, element 67).

As per claim 13, Lipner teaches as set forth above the computer readable medium further comprising:

at least one of said executable instructions causing additional information about said current output to be displayed on said display screen (col. 5, lines 53-57 and Fig 3, element 61).

As per claim 14, Lipner teaches a method of providing interactive control in a control system that uses sequential control modules, said method comprising:

presenting an interactive display screen (col. 4, lines 35-39 and Fig. 3) to an operator that displays:

a plurality of outputs (col. 5, lines 62-65 and Fig. 3, element 67) of a step (Fig. 3, element 65) of at least one of said sequential control modules (col. 3, lines 28-29 and 49-51 and Fig. 3, element 49),

a summary area that provides a name of said sequential control module and a list of steps in said sequential control module (col. 2, lines 10-13, col. 4, lines 53-55, col. 5, lines 3-5 and Fig. 3, element 49),

a details area that provides a step name and a step description for said step (Fig. 3, element 65), and

a parameters area that provides a current value of at least one parameter associated with said step (col. 5, lines 63-65 and Fig. 3, element 67);

determining whether a current one of said outputs is an interactive instruction (col. 2, lines 27-35 and col. 4, lines 21-22; when a sequential module is in an automatic sequence mode (i.e. at least one automatic expression) wherein a step's condition is not meet, the step is violated, the automatic sequencing will terminate requiring operator intervention (i.e. at least on interactive instruction)) or an automatic expression (col. 2, lines 27-35 and col. 4, lines 19-20; i.e. automatic sequencing/Automatic Mode);

if said current output is an interactive instruction (col. 2, lines 27-35 and col. 4, lines 19-22, i.e. when a state is violated, it is determined that an interactive instruction will occur), determining whether said interactive instruction has been confirmed by said operator (col. 6, lines 16-22);

if said interactive instruction has been confirmed by said operator, marking said current output complete (col. 4, lines 24-25); and

if said current output is an automatic expression (col. 2, lines 27-35 and col. 4, lines 19-20; i.e. automatic sequencing/Automatic Mode), using at least one controller (Fig. 1, element 5) in said control system to execute said automatic expression (col. 3, lines 13-17 and col. 4, lines 19-20).

Lipner does not expressly teach wherein said selected step is selected from said list and a display of a combination of at least one automatic expression and at least one interactive instruction.

Van Weele teaches a selected step (col. 7, lines 33-40, i.e. Sequence) is selected (col. 7, lines 3-24) from said list (col. 7, lines 41-50, i.e. Section).

Van Weele does not expressly teach a display of a combination of at least one automatic expression and at least one interactive instruction.

Impink teaches to a display (col. 6, lines 43-51, col. 15, line 67, col. 16, lines 1-5 and Fig. 1, element 27) of a combination (Table II) of at least one automatic expression (col. 13, lines 59-62 and col. 14, lines 51-56 and 59-65) and at least one interactive instruction (col. 14, lines 47-50 and 56-59).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Lipner to include a selected step is selected from said list to more efficiently control and supervise increasingly complex manufacturing processes by subdividing informational

attributes (Van Weele: col. 2, lines 1-4); and a display of a combination of at least one automatic expression a major advantage of the display generated in accordance with the invention is that all of the information is brought to one place for use by the operator (Impink: col. 13, lines 52-55).

As per claim 15, Lipner teaches as set forth above a control system that uses sequential control modules, said control system comprising:

an operator station (Fig. 1, element 19) that comprises a user interface component (col. 3, lines 47-49 and Fig. 3, element 33 and 35) that provides a display to an operator (Fig. 3) and a program that runs on said operator station an interactive procedure (col. 3, lines 66-67 and col. 4, lines 19-22) to present on said display a table view (Fig. 3) comprising:

a plurality of outputs (col. 5, lines 62-65 and Fig. 3, element 67) of an operator step (Fig. 3, element 65) of at least one of said sequential control modules (col. 2, lines 10-13, col. 4, lines 53-55, col. 5, lines 3-5 and Fig. 3, element 47)

a summary area (Fig. 3, element 49) that provides a name of said sequential control module (Fig. 3, element 47) and a list of steps in said sequential control module (col. 2, lines 10-13, col. 4, lines 53-55 and col. 5, lines 3-5),

a details area that provides a step name and a step description for said step (Fig. 3, element 65), and

a parameters area that provides a current value of at least one parameter associated with said step (col. 5, lines 63-65 and Fig. 3, element 67); and

a controller (col. 3, lines 18-21 and Fig. 1, element 15) that executes said automatic expression automatically and said interactive instruction at least partly in response to one or more inputs of said operator to said operator station (col. 2, lines 27-35, col. 3, lines 58-64 and col. 4, lines 19-22).

Lipner does not expressly teach wherein said selected step is selected from said list and a display of a combination of at least one automatic expression and at least one interactive instruction.

Van Weele teaches a selected step (col. 7, lines 33-40, i.e. Sequence) is selected (col. 7, lines 3-24) from said list (col. 7, lines 41-50, i.e. Section).

Van Weele does not expressly teach a display of a combination of at least one automatic expression and at least one interactive instruction.

Impink teaches to a display (col. 6, lines 43-51, col. 15, line 67, col. 16, lines 1-5 and Fig. 1, element 27) of a combination (Table II) of at least one

automatic expression (col. 13, lines 59-62 and col. 14, lines 51-56 and 59-65) and at least one interactive instruction (col. 14, lines 47-50 and 56-59).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Lipner to include a display of a combination of at least one automatic expression a major advantage of the display generated in accordance with the invention is that all of the information is brought to one place for use by the operator (col. 13, lines 52-55).

(10) Response to Argument

Appellant's arguments (regarding Arguments, pgs. 7-17 of Appeal Brief), filed on 30 April 2009, have been fully considered but they are not persuasive.

(A) First Ground - independent claim 4 and dependent claims 6-10 stand or fall together. Independent claim 11 and dependent claims 12 and 13 stand or fall together, Independent claim 14 and dependent claims 2 and 3 stand or fall together. Claim 15 stands alone.

(a) Claims 2-5 and 7-15 were rejected under 35 U.S.C. 103(a) over the Lipner patent in view of the van Weele patent. The Final Office Action improperly rejected claims 2-5 and 7-15.

(i) In response to Appellant's argument that, "The combination of the Lipner patent and the van Weele patent does not disclose that the table view comprises "a plurality of outputs of a selected step of at least one of said sequential control modules, wherein said outputs comprise a combination of at

least one automatic expression and at least one interactive instruction" recited in independent claims 4, 11, 14 and 15." (see Brief, pg. 7, paragraph 3- pg. 11, paragraph 1) The Examiner respectfully disagrees.

The Appellant has further divided the argument above into several specific arguments, which have been addressed as set forth below:

- In response to Appellant's argument, "The Lipner patent lacks a table view as claimed." (see Brief, pg. 7, paragraph 4 – pg. 8, paragraph 2) The Examiner respectfully disagrees.

Figure 3, element 47 is an example of Lipner's system in a manual mode. Figure 3 has been cited to provide a pictorial view of <u>one</u> example of Lipner's automatic-interactive system, and was not intended to be interpreted in isolation as Lipner's only method/system for providing a control system that uses control modules.

> Furthermore, Lipner teaches "Some of the procedural steps generate control signals which result in modification of process conditions. Such **control signals can be automatically generated by a procedure which is running automatically**. **Some procedures call for verification that the control signal has been effective before advancing to the next step**. In some instances, this may take some time. **If the condition is not satisfied, the step is violated and the automatic sequencing will terminate requiring operator intervention**." (col. 2, lines 27-35)

> "The operator, however, must initiate progression to the next step. **In the "automatic" mode**, the SSCI will **advance to the next step if the pertinent conditions are verified. If the conditions are violated, however, the procedure will transfer to a "violated" mode which requires operator action.**" (col. 4, lines 19-22)

In summary, Lipner teaches to an automatic sequencing/Automatic Mode wherein when a step's condition is not meet, the step is violated, the automatic sequencing terminates requiring operator intervention. Lipner also teaches to indicating an "Automatic Mode" of the Procedure interface screen of Fig. 3, element 47, and when the output of a step(s) has been violated, the term "violated" is indicated next to the step(s) (as shown in the pictorial example of the "Manual Mode" of Figure 3); hence Lipner teaches to Appellant's claimed limitation of "a table view comprising ..... said outputs comprise a combination of at least one automatic expression and at least one interactive instruction".

- In response to Appellant's statement, "There is no disclosure that any of the steps 3-6 is an automatic expression. Therefore, the Examiner's contention is mistaken." (see Brief, pg. 8, paragraph 3) The Examiner respectfully disagrees.

The Examiner indicated on pg. 28 of the Final Office Action mailed 24 July 2008 (as referenced by Appellant, see Brief, pg. 8, paragraph 3), "In summary, Lipner teaches to an automatic sequencing/Automatic Mode wherein when a step's condition is not meet, the step is violated, the automatic sequencing terminates requiring operator intervention. Lipner also teaches to indicating an "Automatic Mode" of the Procedure interface screen of Fig. 3, element 47, and the output of a step(s) has been violated by indicating "violated" next to the step(s) (as shown in the pictorial example of Figure 3); hence Lipner teaches to the Appellant's claimed limitation of "said outputs comprises a combination of at least one automatic expression and at least one interactive instruction"."

The Examiner believes this argument was misinterpreted by the Appellant, and has further clarified her position below:

In summary, Lipner teaches to an automatic sequencing/Automatic Mode wherein when a step's condition is not meet, the step is violated, the automatic sequencing terminates requiring operator intervention. Lipner also teaches to indicating an "Automatic Mode" of the Procedure interface screen of Fig. 3, element 47, and when the output of a step(s) has been violated, the term "violated" is indicated next to the step(s) (as shown in the pictorial **example** of the "Manual Mode" of Figure 3); hence

Lipner teaches to Appellant's claimed limitation of "a table view comprising ..... said outputs comprise a combination of at least one automatic expression and at least one interactive instruction".

- In response to Appellant's argument, "The Lipner patent lacks wherein said output comprise a combination of at least one automatic expression and at least one interactive instruction." (see Brief, pg. 10, paragraph 1) The Examiner respectfully disagrees.

> Lipner teaches "Some of the procedural steps generate control signals which result in modification of process conditions. Such **control signals can be automatically generated by a procedure which is running automatically. Some procedures call for verification that the control signal has been effective before advancing to the next step.** In some instances, this may take some time. **If the condition is not satisfied, the step is violated and the automatic sequencing will terminate requiring operator intervention.**" (col. 2, lines 27-35)
>
> "The operator, however, must initiate progression to the next step. **In the "automatic" mode**, the SSCI will **advance to the next step if the pertinent conditions are verified. If the conditions are violated, however, the procedure will transfer to a "violated" mode which requires operator action.**" (col. 4, lines 19-22)

In summary, Lipner teaches to an automatic sequencing/Automatic Mode wherein when a step's condition is not meet, the step is violated, the automatic sequencing terminates requiring operator intervention. Lipner also teaches to indicating an "Automatic Mode" of the Procedure interface screen of Fig. 3, element 47, and when the output of a step(s) has been violated, the term "violated" is indicated next to the step(s) (as shown in the pictorial example of the "Manual Mode" of Figure 3); hence Lipner teaches to Appellant's claimed limitation of "said outputs comprise a combination of at least one automatic expression and at least one interactive instruction".

- In response to Appellant's argument, "However, the Lipner patent does not discloses or describe that in the "violated" mode screen 47 will present to the user "a combination of at least one automatic expression and at least one interactive instruction" (see Brief, pg. 10, paragraph 1) The Examiner respectfully disagrees.

The Examiner has interpreted the limitation "at least one of said executable instructions causing an interactive display screen to be presented to an operator that displays ... wherein said outputs comprise a combination of both automatic expression and at least one interactive instruction" of claim 11 (for example), as a display of executable

instructions that can cause an interactive display screen to be presented to an operator that displays both an automatic expression and interactive instruction; that has been meet by the combination of Lipner and Van Weele as set forth in the Final Office action mailed on 24 July 2008.

> Furthermore, Lipner teaches "Some of the procedural steps generate control signals which result in modification of process conditions. Such **control signals can be automatically generated by a procedure which is running automatically**. **Some procedures call for verification that the control signal has been effective before advancing to the next step**. In some instances, this may take some time. **If the condition is not satisfied, the step is violated and the automatic sequencing will terminate requiring operator intervention**." (col. 2, lines 27-35)
>
> "The operator, however, must initiate progression to the next step. **In the "automatic" mode**, the SSCI will **advance to the next step if the pertinent conditions are verified. If the conditions are violated, however, the procedure will transfer to a "violated" mode which requires operator action**." (col. 4, lines 19-22)

In summary, Lipner teaches to an automatic sequencing/Automatic Mode wherein when a step's condition is not meet, the step is violated, the automatic sequencing terminates requiring operator intervention. Lipner also teaches to indicating an "Automatic Mode" of the Procedure interface screen of Fig. 3, element 47, and when the output of a step(s)

has been violated, the term "violated" is indicated next to the step(s) (as shown in the pictorial example of the "Manual Mode" of Figure 3); hence Lipner meets Appellant's claimed limitation of "at least one of said executable instructions causing an interactive display screen to be presented to an operator that displays ... wherein said outputs comprise a combination of both automatic expression and at least one interactive instruction".

(ii) In response to Appellant's argument that, "The combination of the Lipner patent and the van Weele patent does not discloses, "at least one controller that is operated by executing said interactive instruction at least partly in response to said operator input and said automatic expression automatically" recited in independent claim 4 and a corresponding recital in independent claim 15." (see Brief, pg. 11, paragraph 2 and 3) The Examiner respectfully disagrees.

> Lipner teaches "The invention is directed to **a Supervisory Sequential Controller Interface ("SSCI") system 15** which is **an on-line work station-based system designed for plant operating procedure and sequential control applications.** As used throughout, procedures and sequential control steps are considered interchangeable terms. The system is designed to provide an interface which allows for both user-paced (manual) and system-paced (automatic) procedure and sequence monitoring." (col. 3, lines 18-26 and Fig. 1, element 15)

> "Some of the procedural steps generate control signals which result in modification of process conditions. Such **control signals can be automatically generated by a procedure which is running automatically. Some procedures call for verification that the control signal has been effective before advancing to the next step**. In some instances, this may take some time. **If the condition is not satisfied, the step is violated and the automatic sequencing will terminate requiring operator intervention.**" (col. 2, lines 27-35)

> "The operator, however, must initiate progression to the next step. **In the "automatic" mode**, the SSCI will **advance to the next step if the pertinent conditions are verified. If the conditions are violated, however, the procedure will transfer to a "violated" mode which requires operator action.**" (col. 4, lines 19-22)

In summary, Lipner teaches to a controller (Fig. 1, element 15) for executing an automatic sequencing/Automatic Mode wherein when a step's condition is not meet, the step is violated, the automatic sequencing terminates requiring operator intervention. Lipner also teaches to indicating an "Automatic Mode" of the Procedure interface screen of Fig. 3, element 47, and when the output of a step(s) has been violated, the term "violated" is indicated next to the step(s) (as shown in the pictorial example of the "Manual Mode" of Figure 3); hence Lipner meets Appellant's claimed limitation of "at least one controller that is operated by executing said interactive instruction at least partly in

response to said operator input and said automatic expression automatically."

(iii) In response to Appellant's argument that, "The combination of the Lipner patent and the van Weele patent does not disclose "at least one of said executable instruction causing a determination of whether a current one of said outputs is an interactive instruction or an automatic expression" as recited in independent claim 11 and in a corresponding recital in independent claim 14." (see Brief, pg. 11, paragraph 3-4 - pg. 12, paragraph 1) The Examiner respectfully disagrees.

> Lipner teaches "The invention is directed to **a Supervisory Sequential Controller Interface ("SSCI") system 15** which is **an on-line work station-based system designed for plant operating procedure and sequential control applications.** As used throughout, procedures and sequential control steps are considered interchangeable terms. The system is designed to provide an interface which allows for both user-paced (manual) and system-paced (automatic) procedure and sequence monitoring." (col. 3, lines 18-26 and Fig. 1, element 15)
>
> "Some of the procedural steps generate control signals which result in modification of process conditions. Such **control signals can be automatically generated by a procedure which is running automatically. Some procedures call for verification that the control signal has been effective before advancing to the next step**. In some instances, this may take some time. **If the**

> **condition is not satisfied, the step is violated and the automatic sequencing will terminate requiring operator intervention.**" (col. 2, lines 27-35)
>
> "The operator, however, must initiate progression to the next step. **In the "automatic" mode**, the SSCI will **advance to the next step if the pertinent conditions are verified. If the conditions are violated, however, the procedure will transfer to a "violated" mode which requires operator action.**" (col. 4, lines 19-22)

In summary, Lipner teaches to a controller (Fig. 1, element 15) for executing an automatic sequencing/Automatic Mode wherein when a step's condition is not meet, the step is violated, the automatic sequencing terminates requiring operator intervention. Lipner also teaches to indicating an "Automatic Mode" of the Procedure interface screen of Fig. 3, element 47, and when the output of a step(s) has been violated, the term "violated" is indicated next to the step(s) (as shown in the pictorial example of the "Manual Mode" of Figure 3). Hence, when a state is violated, there is a determination by the controller indicating a "violated" state, and the initiation of an interactive instruction by the operator; thus Appellant's claimed limitation of "at least one of said executable instruction causing a determination of whether a current one of said outputs is an interactive instruction or an automatic expression".

(iv) In response to Appellant's argument that, "The combination of the Lipner patent and the van Weele patent does not disclose "at least one of said executable instructions causing, if said current output is an interactive instruction, a determination of whether said interactive instruction has been confirmed by said operator" recited in independent claim 11 and a corresponding recital in independent claim 15." (see Brief, pg. 12, paragraph 3 - pg. 13, paragraph 1) The Examiner respectfully disagrees.

> Lipner teaches "When it becomes satisfied, the **user will push the "next" button to manually advance** to step 7. If the step is not satisfied after the time period, the operator will either attempt to satisfy the necessary conditions or he may manually proceed to step 7. However, when the operator does so, **the system will provide a pop-up confirmation notice to him to insure that he does indeed want to continue even though the process parameter conditions are not satisfied.**" (col. 6, lines 16-22)

In summary, the user is required to push, a "next" button to advance to the next step during an interactive instruction, and the system will only advance to the next if the system determines the "next" button (i.e. confirmation) has been engaged. Hence, Appellant's claimed limitation "at least one of said executable instructions causing, if said current output is an interactive instruction, a determination of whether said interactive instruction has been

confirmed by said operator" has been meet by the combination of Lipner and Van Weele.

(v) In response to Appellant's argument that, "The combination of the Lipner patent and the van Weele patent does not disclose "at least one of said executable instructions causing, if said interactive instruction has been confirmed by said operator, a marking said current output complete as recited in independent claim 11 and a corresponding recital in independent claim 14." (see Brief, pg. 13, paragraph 2-4) The Examiner respectfully disagrees.

> Lipner teaches "In the "automatic" mode, the SSCI will advance to the next step if the pertinent conditions are verified. If the conditions are violated, however, the procedure will transfer to a "violated" mode which requires operator action. In FIG. 2, some of the procedures are in an "initial" state ready to start. **When a procedure has been completed it will be placed in a "completed" mode."** (col. 4, lines 19-25)

> Lipner teaches "When it becomes satisfied, the **user will push the "next" button to manually advance** to step 7. If the step is not satisfied after the time period, the operator will either attempt to satisfy the necessary conditions or he may manually proceed to step 7. However, when the operator does so, **the system will provide a pop-up confirmation notice to him to insure that he does indeed want to continue even though the process parameter conditions are not satisfied."** (col. 6, lines 16-22)

In summary, the user is required to push a "next" button to advance to the next step during an interactive instruction, and the system will only advance to the next if the system determines the "next" button (i.e. confirmation) has been engaged; and upon completion of confirmation the step/procedure will be placed in a "completed" mode. Hence, Appellant's claimed limitation "at least one of said executable instructions causing, if said interactive instruction has been confirmed by said operator, a marking said current output complete" has been meet by the combination of Lipner and Van Weele as set forth in the Final Office Action mailed on 24 July 2009.

Examiner's Notes:

1. In the alternative, with regards to the Appellant's argument of Lipner's failure to teach "said outputs comprise a combination of at least one automatic expression and at least one interactive instruction", the Examiner notes a person of ordinary skill could consider and interpret the base reference of Lipner as teaching "said outputs comprise a combination of at least one automatic expression and at least one interactive instruction", since Figure 3 (reproduced below for convenience) of Lipner displays both a violated step (i.e. the interactive instruction), as well as, the next sequential step (i.e. the automatic expression).

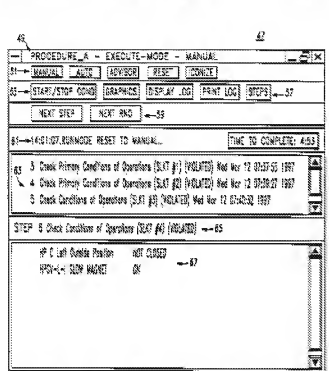

FIG.3

2. The Examiner notes, Appellant's use of the clause "wherein" in the claims. The Appellant is reminded that use of the "wherein" does not exclude the definition/interpretation of optional components and/or steps, i.e. the apparatus, system or method may or may not have the components and/or steps, per MPEP 2111.04, recited below for convenience:

2111.04 [R-3] "Adapted to," "Adapted for," "Wherein," and "Whereby" Clauses

Claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure. However, examples of claim language, although not exhaustive, that may raise a question as to the limiting effect of the language in a claim are:

(A) " adapted to " or "adapted for " clauses;
(B) " wherein " clauses; and
(C) " whereby " clauses.

The determination of whether each of these clauses is a limitation in a claim depends on the specific facts of the case. In Hoffer v. Microsoft Corp., 405 F.3d 1326, 1329, 74 USPQ2d 1481, 1483 (Fed. Cir. 2005), the court held that when a "whereby' clause states a condition that is material to patentability, it cannot be ignored in order to change the substance of the invention." Id. However, the court noted (quoting Minton v. Nat 'l Ass 'n of Securities Dealers, Inc., 336 F.3d 1373, 1381, 67 USPQ2d 1614, 1620 (Fed. Cir. 2003)) that a "whereby clause in a method claim is not given weight when it simply expresses the intended result of a process step positively recited.'"

(B) Second Ground - independent claim 4 and dependent claims 6-10 stand or fall together. Independent claim 11 and dependent claims 12 and 13 stand or fall together, Independent claim 14 and dependent claims 2 and 3 stand or fall together. Claim 15 stands alone.

(a) The second ground of rejection presented for review is the propriety of the final rejection of claims 2-5 and 7-15 under 35 U.S.C. 103(a) as obvious over the Lipner patent in view of the van Weele patent, or in the alternative, under 35 U.S.C 103(a) as obvious over the Lipner patent in view of the van Weele patent in further view of the Impink patent.

(i) In response to Appellant's argument that, "The combination of the

Lipner patent, the van Weele patent and the Impink patent does not discloses

that the table view comprises "a plurality of outputs of a selected step of at least one of said sequential control modules, wherein said outputs comprise a combination of at least one automatic expressly and at least one interactive instruction" recited in independent claims 4, 11, 14 and 15." (see Brief, pg. 14, paragraph 5 - pg. 17, paragraph 3) The Examiner respectfully disagrees.

The Appellant has further divided the argument above into several specific arguments, which have been addressed as set forth below:

- In response to Appellant's statement, "At page 16 of the final Office Action the Examiner admits that neither the Lipner patent nor the van Weele patent discloses or teaches a display of a combination of at least one automatic expression and at least one interactive instruction." (see Brief, pg. 14, paragraph 6) The Examiner respectfully disagrees.

The Examiner asserts that "a display of a combination of at least one automatic expression and at least one interactive instruction" is taught by Lipner, however has offered an alternative rejection to further clarify the rejection based on the Appellant's contention that Lipner does not teach, "a combination of at least one automatic expression and at least one interactive instruction". In addition, the Examiner recognizes the Appellant has not accounted for the combination of Lipner, Van Weele and Impink under 35 U.S.C 103(a) for this limitation as set forth in the Non-Office Action mailed on 24 July 2008.

Further, Impink is relied upon to display (col. 6, lines 43-51, col. 15, line 67, col. 16, lines 1-5 and Fig. 1, element 27) a combination (Table II) of at least one automatic expression (col. 13, lines 59-62 and col. 14, lines 51-56 and 59-65) and at least one interactive instruction (col. 14, lines 47-50 and 56-59).

> "The computer 23 interfaces to a display generator 25 (such as a Raster Technologies Model 180 unit) to provide the color graphics output of the procedures program on a visual display device such as a high-resolution color monitor 27. The user 11, or operator, observes the visual display generated on the color monitor and provides input to the system through a keypad or equivalent device such as a touch screen overlay on the color monitor 29." (col. 6, lines 43-51)

> "The user is not burdened with remembering whether a parameter or component should be checked; the system does it for him. As a result, the user is able to concentrate on transient recovery, while the system serves as his memory." (col. 13, lines 59-62)

TABLE II

Procedure	Step	Finish Time	Step/Sub-step Status At Finish			
E-O	1	09:05:30	2	2	2	2
E-O	2	09:05:35	2			
E-O	3	09:05:40	2	2		
E-O	4	09:05:50	3			
E-O	5	09:06:05	2	2	2	2
E-O	6	09:06:15	2	2		
E-O	7	09:06:25	1	-2	2	
E-O	8	09:06:50	2	2	2	
E-O	9	09:07:00	2			
E-O	10	09:07:25	2			
E-O	11	09:07:30	2			
E-O	12	09:08:20	2			
E-O	13	09:09:05	2			
E-O	14	09:09:30	2			
E-O	15	09:09:33	2	2		
E-O	16	09:10:45	1			
FR-M.1	10	09:13:40	1			

(col. 14, lines 25-43)

> "The numeral "1" indicates that the condition was not verified by the sensors, but that the operator indicated that the recommended manual action had been completed. An "O" indicates that the required action was overridden. Some substeps do not require operator action but indicate whether a particular condition exists or not. An example of this occurs in Step 7. The first substep checks the motor driven auxiliary feedwater pumps as was illustrated by the display of FIG. 3." (col. 14, lines 47-56)

> "The second substep of Step 7 determines whether it is necessary to have the turbine driven pump on. The "-2" indicates that it is not necessary. A "-1" would have indicated that it was necessary. The third substep then checks if the turbine driven pump is on. The "2" indicates that the sensors detect that it is on in the situation depicted by the example." (col. 14, lines 59-65)

> "Depending on the particular application and need the terminals could be either passive, simply displaying information generated by the host computer, or active, transmitting local operator input to the host computer as well as displaying computer output to the operator." (col. 15, lines 67-col. 16, lines 1-5)

In summary, Impink teaches, in the alternative, a table view (Table II) of passive steps (i.e. an automatic expression; e.g. "-2", "-1" and "2" indications) and active steps (i.e. an interactive instruction; e.g. "1" and "O" indications). Hence, Impink, in the alternative, teaches to Appellant's claimed limitation of "a table view comprises "a plurality of outputs of a selected step of at least one of said sequential control modules, wherein said outputs comprise a combination of at least one automatic expressly and at least one interactive instruction"" as set forth in the Final Office Action mailed on 24 July 2009.

(11) Evidence Appendix

The Appellant has not submitted any evidence.

(12) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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